Complete Summary

GUIDELINE TITLE

Antisocial personality disorder. Treatment, management and prevention.

BIBLIOGRAPHIC SOURCE(S)

National Collaborating Centre for Mental Health. Antisocial personality disorder. Treatment, management and prevention. London (UK): National Institute for Health and Clinical Excellence (NICE); 2009 Jan. 48 p. (Clinical guideline; no. 77).

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Antisocial personality disorder (ASPD) including conduct problems in children and adolescents and dangerous and severe personality disorder (DSPD)
- Common comorbidities in people with ASPD

Note: The guideline does not cover:

- The separate management of comorbid conditions
- The management of criminal and antisocial behaviour in the absence of a diagnosis of ASPD

GUIDELINE CATEGORY

Management
Prevention

Risk Assessment
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Pediatrics
Preventive Medicine
Psychiatry
Psychology

INTENDED USERS

Advanced Practice Nurses
Nurses
Patients
Physician Assistants
Physicians
Psychologists/Non-physician Behavioral Health Clinicians
Social Workers
Substance Use Disorders Treatment Providers

GUIDELINE OBJECTIVE(S)

To make recommendations for the treatment, management and prevention of antisocial personality disorder in primary, secondary, and forensic healthcare

TARGET POPULATION

- Adults with a diagnosis of antisocial personality disorder (ASPD) in the National Health Service (NHS) and prison system
- Children and adolescents at significant risk of developing ASPD

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation/Risk Assessment

1. Identifying children at risk of developing conduct problems
2. Assessment and management of risk of violence including:
    - History of current and previous violence and current life stressors
    - Contact with the criminal justice system
    - Presence of comorbid mental disorders and substance misuse
    - Using standardized risk assessment tools (e.g., Psychopathy Checklist–Revised [PCL-R]Â or Psychopathy Checklist-Screening Version [PCL-SV], Historical, Clinical, Risk Management-20 [HCR-20])
    - Developing a comprehensive risk management planÂ

Treatment/Management/Prevention

1. Early interventions for preschool children including interventions to improve parenting skills
2. Interventions for children with conduct problems younger than 12 years including cognitive behavioral interventions andÂ parent-training/education programs
3. Interventions for children with conduct problems aged between 12 and 17 years and their families including parent-training programs, strategic and functional family therapy, multidimensional treatment foster care
4. Management of antisocial personality disorder including psychological interventions, pharmacological interventions, management of drug and alcohol misuse
5. Management of psychopathy and dangerous and severe personality disorder (e.g., Reasoning and Rehabilitation program)
6. Organization and planning of services
7. Staff training, supervision, and support

MAJOR OUTCOMES CONSIDERED

- Prevalence of antisocial personality disorder
- Clinical effectiveness
- Sensitivity, specificity, positive and negative predictive validity of risk assessment tools
- Behaviour problems (impulsivity, anger, aggression)
- Likelihood of substance use
- School misbehaviour
- Seriousness of offences
- Criminal behaviour
- Rate of delinquency
- Rates of arrests and convictions
- Recidivism
- Cost effectiveness

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases
Searches of Unpublished Data

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Mental Health (NCCMH) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

Systematic Clinical Literature Review

The aim of the clinical literature review was to systematically identify and synthesise relevant evidence from the literature in order to answer the specific clinical questions developed by the Guideline Development Group (GDG).

Methodology

A stepwise, hierarchical approach was taken to locating and presenting evidence to the GDG. The NCCMH developed this process based on methods set out in The Guidelines Manual (NICE, 2006) and after considering recommendations from a range of other sources. These included:

- Clinical Policy and Practice Program of the New South Wales Department of Health (Australia)
- Clinical Evidence online
- The Cochrane Collaboration
- New Zealand Guidelines Group
- National Health Service (NHS) Centre for Reviews and Dissemination
- Oxford Centre for Evidence-Based Medicine
- Scottish Intercollegiate Guidelines Network (SIGN)
- United States Agency for Healthcare Research and Quality
- Oxford Systematic Review Development Programme
- Grading of Recommendations: Assessment, Development, and Evaluation (GRADE) Working Group**Â**

The Search Process for Questions Concerning Interventions

All searches were based on the standard mental health related bibliographic databases (EMBASE, MEDLINE, PsycINFO, Cochrane Library, CENTRAL and C2-SPECTR) for all trials potentially relevant to the guideline. In addition, where material relating to interventions was unlikely to be found in mainstream medical databases, an attempt was made to identify and search other topic specific databases, including NCJRS, IBSS and FEDRIP.

After the initial search results were scanned liberally to exclude irrelevant papers, the review team used a purpose-built 'study information' database to manage both the included and the excluded studies (eligibility criteria were developed after consultation with the GDG). For questions without good-quality evidence (after the initial search), a decision was made by the GDG about whether to (a) repeat the search using subject-specific databases (for example, CINAHL, AMED, SIGLE or PILOTS), (b) conduct a new search for lower levels of evidence or (c) adopt a consensus process. Future guidelines will be able to update and extend the usable evidence base starting from the evidence collected, synthesised and analysed for this guideline.

In addition, searches were made of the reference lists of all eligible systematic reviews and included studies, as well as the list of evidence submitted by stakeholders. Known experts in the field, based both on the references identified in early steps and on advice from GDG members, were sent letters requesting relevant studies that were in the process of being published. In addition, the tables of contents of appropriate journals were periodically checked for relevant studies.

The Search Process for Questions Concerning the Organisation and Experiences of Care

For questions related to the organisation and experiences of care, the search process was the same as described above, except that the evidence base was formed from qualitative studies. In situations where it was not possible to identify a substantial body of appropriately designed studies that directly addressed each clinical question, a consensus process was adopted.

The Search Process for Questions of Assessment

For questions related to assessment, the search process was the same as described above, except that the initial evidence base was formed from studies with the most appropriate and reliable design to answer the particular question. That is, for questions about assessment, the initial search was for cross-sectional studies. In situations where it was not possible to identify a substantial body of appropriately designed studies that directly addressed each clinical question, a consensus process was adopted.

Search Strategies

Search strategies developed by the review team consisted of a combination of subject heading and free-text phrases. Specific strategies were developed for the guideline topic and, where necessary, for each clinical question. In addition, the review team used filters developed for systematic reviews, randomised clinical trials (RCTs) and other appropriate research designs (refer to Appendix 8 in the full version of the original guideline document [see the "Availability of Companion Documents" field]).

Study Selection

All primary-level studies included after the first scan of citations were acquired in full and re-evaluated for eligibility at the time they were being entered into the study information database. Appendix 8 of the full version of the original guideline document lists the standard inclusion and exclusion criteria. More specific eligibility criteria were developed for each clinical question and are described in the relevant clinical evidence chapters of the full version of the original guideline document. Eligible systematic reviews and primary-level studies were critically appraised for methodological quality (see Appendix 9 and Appendix 10 in the full version of the original guideline document [see the "Availability of Companion Documents" field]). The eligibility of each study was confirmed by at least one member of the Â appropriate topic group.

For some clinical questions, it was necessary to prioritise the evidence with respect to the UK context (that is, external validity). To make this process explicit, the topic groups took into account the following factors when assessing the evidence:

- Participant factors (for example, gender, age and ethnicity)

- Provider factors (for example, model fidelity, the conditions under which the intervention was performed and the availability of experienced staff to undertake the procedure)
- Cultural factors (for example, differences in standard care and differences in the welfare system)

It was the responsibility of each topic group to decide which prioritisation factors were relevant to each clinical question in light of the UK context and then decide how they should modify their recommendations.

Unpublished Evidence

The GDG used a number of criteria when deciding whether or not to accept unpublished data. First, the evidence must have been accompanied by a trial report containing sufficient detail to properly assess the quality of the data. Second, the evidence must have been submitted with the understanding that data from the study and a summary of the study's characteristics would be published in the full guideline. Therefore, the GDG did not accept evidence submitted as commercial in confidence. However, the GDG recognised that unpublished evidence submitted by investigators might later be retracted by those investigators if the inclusion of such data would jeopardise publication of their research.

Health Economics Methods

Search Strategy

For the systematic review of economic evidence the standard mental-health-related bibliographic databases (EMBASE, MEDLINE, CINAHL and PsycINFO) were searched. For these databases, a health economics search filter adapted from the Centre for Reviews and Dissemination at the University of York was used in combination with a general search strategy for antisocial personality disorder, offending behaviour and the antisocial personality disorder construct. Additional searches were performed in specific health economics databases (NHS Economic Evaluation Database [NHS EED], Office of Health Economics, Health Economics Evaluation Database [OHE HEED]), as well as in the Health Technology Assessment (HTA) database. For the HTA and NHS EED databases, general search strategies for the population groups of interest were used. OHE HEED was searched using a shorter, database-specific strategy. Initial searches were performed in January 2007. The searches were updated regularly, with the final search conducted 6 weeks before the consultation period. Details on the search strategies adopted for the systematic review of economic evidence are provided in Appendix 11 of the full version of the original guideline document (see the "Availability of Companion Documents" field).

In parallel to searches of electronic databases, reference lists of eligible studies and relevant reviews were searched by hand. Studies included in the clinical evidence review were also screened for economic evidence.

In addition to searches for economic evidence, literature on health-related quality of life of people with antisocial personality disorder and related symptoms and

behaviours was systematically searched to identify studies reporting appropriate utility weights that could be utilised in a cost-utility analysis.

The systematic search for economic evidence resulted in more than 20,000 references in total. Publications that were clearly not relevant to the topic (that is, did not provide any information on the economics of antisocial personality disorder and related symptoms and behaviours) were excluded first. The abstracts of all potentially relevant publications (108 papers) were then assessed against a set of inclusion criteria by the health economist. Full texts of all potentially eligible studies (including those for which relevance/eligibility was not clear from the abstract) were obtained. Studies that did not meet the inclusion criteria, were duplicates, were secondary publications of one study, or had been updated in more recent publications were subsequently excluded. Finally, 32 studies that provided information on the economics of antisocial personality disorder and related symptoms and behaviour were selected. Of these, 15 were cost-of-illness studies or studies that reported data on healthcare resource use and intangible costs associated with the populations covered in the guideline, and 17 studies were economic evaluations of interventions aiming at management or prevention of antisocial personality disorder, offending behaviour and related conditions. All economic evaluations eligible for inclusion in the systematic review of economic literature were critically appraised according to the checklists used by the *British Medical Journal* to assist referees in appraising full and partial economic analyses (see Appendix 12 in the full version of the original guideline document [see the "Availability of Companion Documents" field]).

Inclusion Criteria

The following inclusion criteria were applied to select studies identified by the economic searches for further analysis:

- No restriction was placed on language or publication status of the papers.
- Studies published from 1996 onwards were included. This date restriction was imposed in order to obtain data relevant to current healthcare settings and costs.
- Only studies from Organisation for Economic Co-operation and Development countries were included, as the aim of the review was to identify economic information transferable to the UK context.
- Selection criteria regarding types of clinical conditions and population groups as well as minimum required periods of follow-up were identical to that determined for the clinical literature review.
- Studies were included provided that sufficient details regarding methods and results were available to enable the methodological quality of the study to be assessed, and provided that the study's data and results were extractable. Poster presentations of abstracts were excluded.
- Full economic evaluations that compared two or more relevant options and considered both costs and consequences (that is, cost–consequence analyses, cost–effectiveness analyses, cost–utility analyses or cost–benefit analyses) as well as partial economic evaluations (that is, costing analyses) were included in the systematic review; non-comparative studies were not considered for review.

NUMBER OF SOURCE DOCUMENTS

Clinical Effectiveness - Not stated

Cost-Effectiveness

A total of 32 studies that provided information on the economics of antisocial personality disorder and related symptoms and behaviour were selected.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus
Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

The quality of the evidence was based on the quality assessment components (study design, limitations to study quality, consistency, directness and any other considerations) and graded using the following definitions:

- **High** - Further research is very unlikely to change the confidence in the estimate of the effect.
- **Moderate** - Further research is likely to have an important impact on the confidence in the estimate of the effect and may change the estimate.
- **Low** - Further research is very likely to have an important impact on the confidence in the estimate of the effect and is likely to change the estimate.
- **Very low** - Any estimate of effect is very uncertain.

METHODS USED TO ANALYZE THE EVIDENCE

Meta-Analysis
Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Mental Health (NCCMH) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

Clinical Effectiveness

Data Extraction

Study characteristics and outcome data were extracted from all eligible studies, which met the minimum quality criteria, using a bespoke database and Review Manager 4.2.10 (see Appendix 9 in the full version of the original guideline document [see the "Availability of Companion Documents" field]).

In most circumstances, for a given outcome (continuous and dichotomous), where more than 50% of the number randomised to any group were lost to follow up,

the data were excluded from the analysis (except for the outcome 'leaving the study early for any reason', in which case, the denominator was the number randomised). Where possible, dichotomous efficacy outcomes were calculated on an intention-to-treat basis (that is, a 'once-randomised-always-analyse' basis). Where there was good evidence that those participants who ceased to engage in the study were likely to have an unfavourable outcome, early withdrawals were included in both the numerator and denominator. Adverse effects were entered into Review Manager as reported by the study authors because it was usually not possible to determine whether early withdrawals had an unfavourable outcome. Where there was limited data for a particular review, the 50% rule was not applied. In these circumstances the evidence was downgraded due to the risk of bias.

Where some of the studies failed to report standard deviations (for a continuous outcome), and where an estimate of the variance could not be computed from other reported data or obtained from the study author, the following approach was taken:

1. When the number of studies with missing standard deviations was small and when the total number of studies was large, the average standard deviation was imputed (calculated from the included studies that used the same outcome). In this case, the appropriateness of the imputation was made by comparing the standardised mean differences (SMDs) of those trials that had reported standard deviations against the hypothetical SMDs of the same trials based on the imputed standard deviations. If they converged, the meta-analytical results were considered to be reliable.
2. When the number of studies with missing standard deviations was large or when the total number of studies was small, standard deviations were taken from a previous systematic review (where available), because the small sample size may allow unexpected deviation due to chance. In this case, the results were considered to be less reliable.

The meta-analysis of survival data, such as time to any mood episode, was based on log hazard ratios and standard errors. Since individual patient data were not available in included studies, hazard ratios and standard errors calculated from a Cox proportional hazard model were extracted. Where necessary, standard errors were calculated from confidence intervals or p-value according to standard formulae (for example, Cochrane Reviewers' Handbook 4.2.2.). Data were summarised using the generic inverse variance method using Review Manager 4.2.7.

Consultation with another reviewer or members of the Guideline Development Group (GDG) was used to overcome difficulties with coding. Data from studies included in existing systematic reviews were extracted independently by one reviewer and cross-checked with the existing data set. Where possible, two independent reviewers extracted data from new studies. Where double data extraction was not possible, data extracted by one reviewer was checked by the second reviewer.

Disagreements were resolved with discussion. Where consensus could not be reached, a third reviewer or GDG members resolved the disagreement. Masked assessment (that is, blind to the journal from which the article comes, the

authors, the institution and the magnitude of the effect) was not used since it is unclear that doing so reduces bias.

Synthesising the Evidence

Where possible, meta-analysis was used to synthesise the evidence using Review Manager 4.2.8. If necessary, reanalyses of the data or sub-analyses were used to answer clinical questions not addressed in the original studies or reviews.

Dichotomous outcomes were analysed as relative risks (RR) with the associated 95% confidence interval (CI) (for an example, see Figure 1 in the full version of the original guideline document [see the "Availability of Companion Documents" field]). A relative risk (also called a risk ratio) is the ratio of the treatment event rate to the control event rate. An RR of 1 indicates no difference between treatment and control. In Figure 1, the overall RR of 0.73 indicates that the event rate (that is, non-remission rate) associated with intervention A is about three quarters of that with the control intervention or, in other words, the relative risk reduction is 27%.

The CI shows with 95% certainty the range within which the true treatment effect should lie and can be used to determine statistical significance. If the CI does not cross the 'line of no effect', the effect is statistically significant.

Continuous outcomes were analysed as weighted mean differences (WMD), or as a standardised mean difference (SMD) when different measures were used in different studies to estimate the same underlying effect (for an example, see Figure 2 in the full version of the original guideline document). If provided, intention-to-treat data, using a method such as 'last observation carried forward', were preferred over data from completers.

To check for consistency between studies, both the I^2 test of heterogeneity and a visual inspection of the forest plots were used. The I^2 statistic describes the proportion of total variation in study estimates that is due to heterogeneity.

Included/excluded studies tables, generated automatically from the study database, were used to summarise general information about each study (see Appendix 9 in the full version of the original guideline document [see the "Availability of Companion Documents" field]). Where meta-analysis was not appropriate and/or possible, the reported results from each primary-level study were also presented in the included studies table (and included, where appropriate, in a narrative review).

Presenting the Data to the GDG

Study characteristics tables and, where appropriate, forest plots generated with Review Manager were presented to the GDG in order to prepare a GRADE evidence profile table for each review and to develop recommendations.

GRADE Profile Tables

A GRADE evidence profile was used to summarise both the quality of the evidence and the results of the evidence synthesis (see Table 1 in the full version of the original guideline document for an example of an evidence profile). For each outcome, quality may be reduced depending on theÂ following factors: study design, limitations,Â inconsistency, indirectness, and imprecision.

For observational studies, the quality may be increased if there is a large effect, plausible confounding would have changed the effect, or there is evidence of a dose-response gradient. Each evidence profile also included a summary of the findings: number of patients included in each group, an estimate of the magnitude of the effect, and the overall quality of the evidence for each outcome.

Refer to Section 3.5 in the full version of the original guideline document (see the "Availability of Companion Documents" field) for more information on methods used to analyze the evidence.

Health Economics Methods

Data Extraction

Data were extracted by the health economists using a standard economic data extraction form (see Appendix 13 in the full version of the original guideline document [see the "Availability of Companion Documents" field]).

Presentation of Economic Evidence

The economic evidence identified by the health economics systematic review is summarised in the respective chapters of the full version of the original guideline, following presentation of the clinical evidence. The characteristics and results of all economic studies included in the review are provided in the form of evidence tables in Appendix 14 of the full version of the original guideline document (see the "Availability of Companion Documents" field).

Results of additional economic modelling undertaken alongside the guideline development process are also presented in the respective sections of the full guideline.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus
Informal Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Mental Health (NCCMH) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

The Guideline Development Group (GDG)

The GDG consisted of: a representative for service users, and professionals from psychiatry, forensic psychiatry, clinical psychology, forensic psychology, social work, general practice, nursing, general practice in prison, Child and Adolescent Mental Health Services, the Ministry of Justice and the Probation Service. The carer perspective was provided by a carer special advisor. The guideline development process was supported by staff from the NCCMH, who undertook the clinical and health economics literature searches, reviewed and presented the evidence to the GDG, managed the process, and contributed to drafting the guideline.

Guideline Development Group Meetings

Fifteen GDG meetings were held between March 2007 and October 2008. During each day-long GDG meeting, in a plenary session, clinical questions and clinical and economic evidence were reviewed and assessed, and recommendations formulated. At each meeting, all GDG members declared any potential conflicts of interest, and service user and carer concerns were routinely discussed as part of a standing agenda.

Topic Groups

The GDG divided its workload along clinically relevant lines to simplify the guideline development process, and GDG members formed smaller topic groups to undertake guideline work in that area of clinical practice. Topic Group 1 covered questions relating to the organisation and experience of care. Topic Group 2 covered risk assessment and management, Topic Group 3 covered early intervention for children, and Group 4 covered interventions for offending behaviour. These groups were designed to efficiently manage the large volume of evidence appraisal prior to presenting it to the GDG as a whole. Each topic group was chaired by a GDG member with expert knowledge of the topic area (one of the healthcare professionals). Topic groups refined the clinical questions, refined the clinical definitions of treatment interventions, reviewed and prepared the evidence with the systematic reviewer before presenting it to the GDG as a whole and helped the GDG to identify further expertise in the topic. Topic group leaders reported the status of the group's work as part of the standing agenda. They also introduced and led the GDG discussion of the evidence review for that topic and assisted the GDG Chair in drafting the section of the guideline relevant to the work of each topic group.

Service Users and Carers

Individuals with direct experience of services gave an integral service-user focus to the GDG and the guideline. The GDG included a representative for the interests of service users. He contributed as a full GDG member in writing the clinical questions, helping to ensure that the evidence addressed service user views and preferences, highlighting sensitive issues and terminology relevant to the guideline, and bringing service-user research to the attention of the GDG. In drafting the guideline, he contributed to writing the guideline´s introduction and identified recommendations from the service user and carer perspective. In addition, the carer perspective was sought from a carer special advisor.

Special Advisors

Special advisors, who had specific expertise in one or more aspects of treatment and management relevant to the guideline, assisted the GDG, commenting on specific aspects of the developing guideline and making presentations to the GDG.

National and International Experts

National and international experts in the area under review were identified through the literature search and through the experience of the GDG members. These experts were contacted to recommend unpublished or soon-to-be published studies in order to ensure up-to-date evidence was included in the development of the guideline. They informed the group about completed trials at the pre-publication stage, systematic reviews in the process of being published, studies relating to the cost effectiveness of treatment and trial data if the GDG could be provided with full access to the complete trial report.Â

Clinical Questions

Clinical questions were used to guide the identification and interrogation of the evidence base relevant to the topic of the guideline. Before the first GDG meeting, an analytic framework (see Appendix 7 in the full version of the original guideline document [see the "Availability of Companion Documents" field]) was prepared by NCCMH staff based on the scope and an overview of existing guidelines, and discussed with the guideline Chair. The framework was used to provide a structure from which the clinical questions were drafted. Both the analytic framework and the draft clinical questions were then discussed by the GDG at the first few meetings and amended as necessary. Where appropriate, the framework and questions were refined once the evidence had been searched and, where necessary, sub-questions were generated. Questions submitted by stakeholders were also discussed by the GDG and the rationale for not including questions was recorded in the minutes. The final list of clinical questions can be found in Appendix 7 of the full version of the original guideline document (see the "Availability of Companion Documents" field).

Forming the Clinical Summaries and Recommendations

Once the GRADE profile tables relating to a particular clinical question were completed, summary tables incorporating important information from the GRADE profiles were developed (these tables are presented in the full version of the original guideline [see the "Availability of Companion Documents" field]). Finally, the systematic reviewer in conjunction with the topic group lead produced a clinical evidence summary.

Once the GRADE profiles and clinical summaries were finalised and agreed by the GDG, the associated recommendations were drafted, taking into account the trade-off between the benefits and downsides of treatment as well as other important factors. These included economic considerations, values of the development group and society, and the group's awareness of practical issues.

Method Used to Answer a Clinical Question in the Absence of Appropriately Designed, High-Quality Research

In the absence of appropriately designed, high-quality research, or where the GDG were of the opinion (on the basis of previous searches or their knowledge of the literature) that there were unlikely to be such evidence, an informal consensus process was adopted. This process focused on those questions that the GDG considered a priority.

Informal Consensus

The starting point for the process of informal consensus was that a member of the topic group identified, with help from the systematic reviewer, a narrative review that most directly addressed the clinical question. Where this was not possible, a brief review of the recent literature was initiated. This existing narrative review or new review was used as a basis for beginning an iterative process to identify lower levels of evidence relevant to the clinical question and to lead to written statements for the guideline. The process involved a number of steps:

1. A description of what is known about the issues concerning the clinical question was written by one of the topic group members
2. Evidence from the existing review or new review was then presented in narrative form to the GDG and further comments were sought about the evidence and its perceived relevance to the clinical question
3. Based on the feedback from the GDG, additional information was sought and added to the information collected. This may include studies that did not directly address the clinical question but were thought to contain relevant data
4. If, during the course of preparing the report, a significant body of primary-level studies (of appropriate design to answer the question) were identified, a full systematic review was done
5. At this time, subject possibly to further reviews of the evidence, a series of statements that directly addressed the clinical question were developed
6. Following this, on occasions and as deemed appropriate by the development group, the report was then sent to appointed experts outside of the GDG for peer review and comment. The information from this process was then fed back to the GDG for further discussion of the statements
7. Recommendations were then developed and could also be sent for further external peer review
8. After this final stage of comment, the statements and recommendations were again reviewed and agreed upon by the GDG

Refer to Section 3.5 in the full version of the original guideline document (see the "Availability of Companion Documents" field) for more information.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

Three studies that evaluated the cost-effectiveness of pre-school programmes for infants and toddlers were included in the systematic review of the economic evidence. A long-term cost-benefit analysis of the High-Scope Perry preschool programme followed up participants as they reached the age of 40. The initial

costs of the programme were compared with any long-term benefits, in terms of net changes (versus no intervention) in educational attainment, lifetime earnings, criminal activity and welfare payments. At various perspectives (the individual participant, general public, and a combination of both), the programme resulted in significant long-term net benefits of between $49,000 and $230,000 per participant.

Another long-term cost-benefit analysis was conducted for the Abecedarian project, followed up participants as they reached the age of 21. Again, initial intervention costs were compared with long-term net benefits in terms of future earnings, maternal earnings, education costs, health improvements and welfare use. The project resulted in significant long-term net benefits of $100,000 per participant.

Finally, a long-term cost-benefit analysis of the Chicago Child-Parent centre programme was undertaken for participants who reached the age of 20. Initial intervention costs were compared with long-term net benefits in terms of education costs, child care costs, welfare payments, abuse/neglect costs and justice/crime costs. Again, at various perspectives (individual participant, taxpayer, both), the programme resulted in significant net benefits of between $12,000 and $34,000 per participant.

One study on economic analysis of parent training for children with conduct disorders undertaken for a recent National Institute for Health and Clinical Excellence (NICE) technology appraisal was identified. According to the technology appraisal, parent training was found to be cost-effective and was recommended for implementation inÂ health and social care settings.

Two studies from the US were identified that considered the cost-effectiveness of interventions targeted at families. One study evaluated functional family therapy (FFT) for moderate to high-risk juvenile offenders (13-17 years). Costs of the intervention were compared to differences in recidivism rates and resulting criminal justice costs versus no intervention. Overall, FFT resulted in significant net savings due to lower rates of recidivism compared with no intervention. The other study was a simple retrospective cost analysis of in-home or in-office family therapy versus no treatment for youths with conduct disorder. Over 30 months, both interventions resulted in significant net savings ($p<0.0001$) in terms of reduced future health care spending.

One study from the US was identified that considered the cost-effectiveness of multi-component interventions targeted at children. The study evaluated the cost effectiveness of the Fast-Track intervention, a ten-year, multi-component intervention designed to reduce violence among at risk children with conduct problems. The extra costs of the intervention programme versus no treatment were evaluated against three clinical outcomes: cases of conduct disorder averted, criminal offences avoided, and acts of interpersonal violence averted. Overall, for all three outcomes, the intervention was not cost-effective at conventional willingness-to-pay thresholds. Subgroup analyses showed that the intervention was more cost-effective for high-risk than low-risk children.

A simple economic model was developed to estimate the net total costs (or cost-savings) associated with provision of Reasoning and Rehabilitation to adult

offenders. The reduction in the re-offending rates achieved by provision of Reasoning and Rehabilitation to adult offenders yielded cost-savings equalling 869 pounds sterling per adult with offending behaviour over one year. Since providing Reasoning and Rehabilitation programmes costs 637 pounds sterling per adult offender, the intervention results in an overall net saving of 232 pounds sterling per adult with offending behaviour over one year. Full results of the base-case analysis are reported in Table 34 in the full version of the original guideline (see the "Availability of Companion Documents" field).

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline was validated through two consultations:

1. The first draft of the guideline (The full guideline, National Institute for Clinical Excellence [NICE] guideline and Quick Reference Guide) were consulted with Stakeholders and comments were considered by the Guideline Development Group (GDG)
2. The final consultation draft of the full guideline, the NICE guideline and the Information for the Public were submitted to stakeholders for final comments

The final draft was submitted to the Guideline Review Panel for review prior to publication.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Mental Health (NCCMH) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

General Principles for Working with People with Antisocial Personality Disorder

People with antisocial personality disorder have tended to be excluded from services, and policy implementation guidance from the Department of Health, 'Personality disorder: no longer a diagnosis of exclusion'Â (available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009546)Â aims to address this. To change the current position, staff need to work actively to engage people with antisocial personality disorder in treatment. Evidence from both clinical trials and scientific studies of antisocial personality disorder shows that positive and reinforcing approaches to the treatment of antisocial personality disorder are more likely to be successful than those that are negative or punitive.

Access and Assessment

People with antisocial personality disorder should not be excluded from any health or social care service because of their diagnosis or history of antisocial or offending behaviour.

Seek to minimise any disruption to therapeutic interventions for people with antisocial personality disorder by:

- Ensuring that in the initial planning and delivery of treatment, transfers from institutional to community settings take into account the need to continue treatment
- Avoiding unnecessary transfer of care between institutions whenever possible during an intervention, to prevent disruption to the agreed treatment plan. This should be considered at initial planning of treatment

Ensure that people with antisocial personality disorder from black and minority ethnic groups have equal access to culturally appropriate services based on clinical need.

When language or literacy is a barrier to accessing or engaging with services for people with antisocial personality disorder, provide:

- Information in their preferred language and in an accessible format
- Psychological or other interventions in their preferred language
- Independent interpreters

When a diagnosis of antisocial personality disorder is made, discuss the implications of it with the person, the family or carers where appropriate, and relevant staff, and:

- Acknowledge the issues around stigma and exclusion that have characterised care for people with antisocial personality disorder
- Emphasise that the diagnosis does not limit access to a range of appropriate treatments for comorbid mental health disorders
- Provide information on and clarify the respective roles of the healthcare, social care and criminal justice services

When working with women with antisocial personality disorder take into account the higher incidences of common comorbid mental health problems and other personality disorders in such women, and:

- Adapt interventions in light of this (for example, extend their duration)
- Ensure that in inpatient and residential settings the increased vulnerability of these women is taken into account

Staff, in particular key workers, working with people with antisocial personality disorder should establish regular one-to-one meetings to review progress, even when the primary mode of treatment is group based.

People with Disabilities and Acquired Cognitive Impairments

When a person with learning or physical disabilities or acquired cognitive impairments presents with symptoms and behaviour that suggest antisocial personality disorder, staff involved in assessment and diagnosis should consider consulting with a relevant specialist.

Staff providing interventions for people with antisocial personality disorder with learning or physical disabilities or acquired cognitive impairments should, where possible, provide the same interventions as for other people with antisocial personality disorder. Staff might need to adjust the method of delivery or duration of the intervention to take account of the disability or impairment.

Autonomy and Choice

Work in partnership with people with antisocial personality disorder to develop their autonomy and promote choice by:

- Ensuring that they remain actively involved in finding solutions to their problems, including during crises
- Encouraging them to consider the different treatment options and life choices available to them, and the consequences of the choices they make

Developing an Optimistic and Trusting Relationship

Staff working with people with antisocial personality disorder should recognise that a positive and rewarding approach is more likely to be successful than a punitive approach in engaging and retaining people in treatment. Staff should:

- Explore treatment options in an atmosphere of hope and optimism, explaining that recovery is possible and attainable
- Build a trusting relationship, work in an open, engaging and non-judgemental manner, and be consistent and reliable

Engagement and Motivation

When providing interventions for people with antisocial personality disorder, particularly in residential and institutional settings, pay attention to motivating them to attend and engage with treatment. This should happen at initial assessment and be an integral and continuing part of any intervention, as people with antisocial personality disorder are vulnerable to premature withdrawal from treatment and supportive interventions.

Involving Families and Carers

Ask directly whether the person with antisocial personality disorder wants their family or carers to be involved in their care, and, subject to the person's consent and rights to confidentiality:

- Encourage families or carers to be involved
- Ensure that the involvement of families or carers does not lead to a withdrawal of, or lack of access to, services
- Inform families or carers about local support groups for families or carers

Consider the needs of families and carers of people with antisocial personality disorder and pay particular attention to the:

- Impact of antisocial and offending behaviours on the family
- Consequences of significant drug or alcohol misuse
- Needs of and risks to any children in the family and the safeguarding of their interests

Prevention of Antisocial Personality Disorder — Working with Children and Young People and Their Families

The evidence for the treatment of antisocial personality disorder in adult life is limited and the outcomes of interventions are modest. The evidence for working with children and young people who are at risk, and their families, points to the potential value of preventative measures. There are definitions of the psychological interventions referred to in the recommendations in section 8 of the original guideline document.

General Principles

Child and adolescent mental health service (CAMHS) professionals working with young people should:

- Balance the developing autonomy and capacity of the young person with the responsibilities of parents and carers
- Be familiar with the legal framework that applies to young people, including the Mental Capacity Act, the Children Acts and the Mental Health Act

Identifying Children at Risk of Developing Conduct Problems

Services should establish robust methods to identify children at risk of developing conduct problems, integrated when possible with the established local assessment system. These should focus on identifying vulnerable parents, where appropriate antenatally, including:

- Parents with other mental health problems, or with significant drug or alcohol problems
- Mothers younger than 18 years, particularly those with a history of maltreatment in childhood
- Parents with a history of residential care
- Parents with significant previous or current contact with the criminal justice system

When identifying vulnerable parents, take care not to intensify any stigma associated with the intervention or increase the child's problems by labelling them as antisocial or problematic.

Early Interventions for Preschool Children at Risk of Developing Conduct Problems and Potentially Subsequent Antisocial Personality Disorder

Early interventions aimed at reducing the risk of the development of conduct problems, and antisocial personality disorder at a later age, may be considered for children identified to be of high risk of developing conduct problems. These should be targeted at the parents of children with identified high-risk factors and include:

- Non-maternal care (such as well-staffed nursery care) for children younger than 1 year
- Interventions to improve poor parenting skills for the parents of children younger than 3 years

Early interventions should usually be provided by health and social care professionals over a period of 6-12 months, and should:

- Consist of well-structured, manualised programmes that are closely adhered to
- Target multiple risk factors (such as parenting, school behaviour, and parental health and employment)

Interventions for Children with Conduct Problems Younger than 12 Years and Their Families

Group-based parent-training/education programmes are recommended in the management of children with conduct disorders. (Note: This recommendation is from 'Parent-training/education programmes in the management of children with conduct disorders' [NICE technology appraisal 102]).

Individual-based parent-training/education programmes are recommended in the management of children with conduct disorders only in situations where there are particular difficulties in engaging with the parents or a family´s needs are too complex to be met by group-based parent-training/education programmes. (Note: This recommendation is from â□˜Parent-training/education programmes in the management of children with conduct disorders´ [NICE technology appraisal 102]).

Additional interventions targeted specifically at the parents of children with conduct problems (such as interventions for parental, marital or interpersonal problems) should not be provided routinely alongside parent-training programmes, as they are unlikely to have an impact on the child's conduct problems.

Programme providers should also ensure that support is available to enable the participation of parents who might otherwise find it difficult to access these programmes.Â (Note: This recommendation is from â□˜Parent-training/education programmes in the management of children with conduct disorders´ [NICE technology appraisal 102]).

Support to enable the participation of parents who might otherwise find it difficult to access these programmes might include:

- Individual parent-training programmes
- Regular reminders about meetings (for example, telephone calls)

- Effective treatment of comorbid disorders (in particular, attention deficit hyperactivity disorder in line with â□˜Attention deficit hyperactivity disorder´ NICE clinical guideline 72)

How to Deliver Interventions for Children with Conduct Problems Aged Younger Than 12 Years and Their Families

It is recommended that all parent-training/education programmes, whether group- or individual-based, should:

- Be structured and have a curriculum informed by principles of social-learning theory
- Include relationship-enhancing strategies
- Offer a sufficient number of sessions, with an optimum of 8–12, to maximise the possible benefits for participants
- Enable parents to identify their own parenting objectives
- Incorporate role-play during sessions, as well as homework to be undertaken between sessions, to achieve generalisation of newly rehearsed behaviours to the home situation
- Be delivered by appropriately trained and skilled facilitators who are supervised, have access to necessary ongoing professional development, and are able to engage in a productive therapeutic alliance with parents
- Adhere to the programme developer´s manual and employ all of the necessary materials to ensure consistent implementation of the programme

Note: This recommendation is from 'Parent-training/education programmes in the management of children with conduct disorders' [NICE technology appraisal 102]).

Programmes should include problem solving (both for the parent and in helping to train their child to solve problems) and the promotion of positive behaviour (for example, through support, use of praise and reward).

Programmes should demonstrate proven effectiveness. This should be based on evidence from randomised controlled trials or other suitable rigorous evaluation methods undertaken independently. (Note: This recommendation is from â□˜Parent-training/education programmes in the management of children with conduct disorders´ [NICE technology appraisal 102]).

Cognitive Behavioural Interventions for Children Aged 8 Years and Older with Conduct Problems

Cognitive problem-solving skills training should be considered for children aged 8 years and older with conduct problems if:

- The child´s family is unwilling or unable to engage with a parent-training programme (see above)
- Additional factors, such as callous and unemotional traits in the child, may reduce the likelihood of the child benefiting from parent-training programmes alone.

For children who have residual problems following cognitive problem-solving skills training, consider anger control or social problem-solving skills training, depending on the nature of the residual problems.

How to Deliver Interventions for Children Aged 8 Years and Older with Conduct Problems

Cognitive problem-solving skills training should be delivered individually over a period of 10–16 weeks. Training should focus typically on cognitive strategies to enable the child to:

- Generate a range of alternative solutions to interpersonal problems
- Analyse the intentions of others
- Understand the consequences of their actions
- Set targets for desirable behaviour

Anger control should usually take place in groups over a period of 10–16 weeks and focus typically on strategies to enable the child to:

- Build capacity to improve the perception and interpretation of social cues
- Manage anger through coping and self-talk
- Generate alternative â□˜non-aggressive´ responses to interpersonal problems

Social problem-solving skills training should usually be conducted in groups over a period of 10-16 weeks. Training should focus typically on strategies to enable the child to:

- Modify and expand their interpersonal appraisal processes
- Develop a more sophisticated understanding of beliefs and desires in others
- Improve their capacity to regulate their emotional responses

Interventions for Young People with Conduct Problems Aged between 12 and 17 Years and Their Families

For parents of young people aged between 12 and 17 years with conduct problems, consider parent-training programmes (see above).

If the parents are unable to or choose not to engage with parent-training programmes, or the young person´s conduct problems are so severe that they will be less likely to benefit from parent-training programmes, consider:

- Brief strategic family therapy for those with predominantly drug-related problems
- Functional family therapy for those with predominantly a history of offending

For young people aged between 12 and 17 years with severe conduct problems and a history of offending and who are at risk of being placed in care or excluded from the family, consider multisystemic therapy.

For young people aged between 12 and 17 years with conduct problems at risk of being placed in long-term out-of-home care, consider multidimensional treatment foster care.

How to Deliver Interventions for Young People with Conduct Problems Aged between 12 and 17 Years and Their Families

Brief strategic family therapy should consist of at least fortnightly meetings over a period of 3 months and focus on:

- Engaging and supporting the family
- Engaging and using the support of the wider social and educational system
- Identifying maladaptive family interactions (including areas of power distribution and conflict resolution)
- Promoting new and more adaptive family interactions (including open and effective communication)

Functional family therapy should be conducted over a period of 3 months by health or social care professionals and focus on improving the interactions within the family, including:

- Engaging and motivating the family in treatment (enhancing perception that change is possible, positive reframing and establishing a positive alliance)
- Problem-solving and behaviour change through parent-training and communication training
- Promoting generalisation of change in specific behaviours to broader contexts, both within the family and the community (such as schools)

Multisystemic therapy should be provided over a period of 3–6 months by a dedicated professional with a low caseload, and should:

- Focus specifically on problem-solving approaches with the family
- Involve and use the resources of peer groups, schools and the wider community

Multidimensional treatment foster care should be provided over a period of 6 months by a team of health and social care professionals able to provide case management, individual therapy and family therapy. This intervention should include:

- Training foster care families in behaviour management and providing a supportive family environment
- The opportunity for the young person to earn privileges (such as time on the computer and extra telephone time with friends) when engaging in positive living and social skills (for example, making their bed and being polite) and good behaviour at school
- Individual problem-solving skills training for the young person
- Family therapy for the birth parents to provide a supportive environment for the young person to return to after treatment

Transition from Child and Adolescent Services to Adult Services

Health and social care services should consider referring vulnerable young people with a history of conduct disorder or contact with youth offending schemes, or those who have been receiving interventions for conduct and related disorders, to appropriate adult services for continuing assessment and/or treatment.

Assessment and Risk Management of Antisocial Personality Disorder

In primary and secondary care services, antisocial personality disorder is under-recognised. When it is identified, significant comorbid disorders such as treatable depression or anxiety are often not detected. In secondary and forensic services there are important concerns about assessing risk of violence and risk of harm to self and others.

Assessment

When assessing a person with possible antisocial personality disorder, healthcare professionals in secondary and forensic mental health services should conduct a full assessment of:

- Antisocial behaviours
- Personality functioning, coping strategies, strengths and vulnerabilities
- Comorbid mental disorders (including depression and anxiety, drug or alcohol misuse, post-traumatic stress disorder and other personality disorders)
- The need for psychological treatment, social care and support, and occupational rehabilitation or development
- Domestic violence and abuse

Staff involved in the assessment of antisocial personality disorder in secondary and specialist services should use structured assessment methods whenever possible to increase the validity of the assessment. For forensic services, the use of measures such as Psychopathy Checklist-Revised (PCL-R) or Psychopathy Checklist-Screening Version (PCL-SV) to assess the severity of antisocial personality disorder should be part of the routine assessment process.

Staff working in primary and secondary care services (for example, drug and alcohol services) and community services (for example, the probation service) that include a high proportion of people with antisocial personality disorder should be alert to the possibility of antisocial personality disorder in service users. Where antisocial personality disorder is suspected and the person is seeking help, consider offering a referral to an appropriate forensic mental health service depending on the nature of the presenting complaint. For example, for depression and anxiety this may be to general mental disorder it may be to a specialist personality disorder or forensic service.

Risk Assessment and Management

Risk assessment is part of the overall approach to assessment and care planning as defined in the framework of the Care Programme Approach, and the following recommendations should be regarded in that context.

Primary Care Services

Assessing risk of violence is not routine in primary care, but if such assessment is required consider:

- Current or previous violence, including severity, circumstances, precipitants and victims
- The presence of comorbid mental disorders and/or substance misuse
- Current life stressors, relationships and life events
- Additional information from written records or families and carers (subject to the person's consent and right to confidentiality), because the person with antisocial personality disorder might not always be a reliable source of information

Healthcare professionals in primary care should consider contact with and/or referral to secondary or forensic services where there is current violence or threats that suggest significant risk and/or a history of serious violence, including predatory offending or targeting of children or other vulnerable people.

Secondary Care Services

When assessing the risk of violence in secondary care mental health services, take a detailed history of violence and consider and record:

- Current or previous violence, including severity, circumstances, precipitants and victims
- Contact with the criminal justice system, including convictions and periods of imprisonment
- The presence of comorbid mental disorder and/or substance misuse
- Current life stressors, relationships and life events
- Additional information from written records or families and carers (subject to the person's consent and right to confidentiality), as the person with antisocial personality disorder might not always be a reliable source of information

The initial risk management should be directed at crisis resolution and ameliorating any acute aggravating factors. The history of previous violence should be an important guide in the development of any future violence risk management plan.

Staff in secondary care mental health services should consider a referral to forensic services where there is:

- Current violence or threat that suggests immediate risk or disruption to the operation of the service
- A history of serious violence, including predatory offending or targeting of children or other vulnerable people

Specialist Personality Disorder or Forensic Services

When assessing the risk of violence in forensic, specialist personality disorder or tertiary mental health services, take a detailed history of violence, and consider and record:

- Current and previous violence, including severity, circumstances, precipitants and victims
- Contact with the criminal justice system, including convictions and periods of imprisonment
- The presence of comorbid mental disorder and/or substance misuse
- Current life stressors, relationships and life events
- Additional information from written records or families and carers (subject to the person´s consent and right to confidentiality), as the person with antisocial personality disorder might not always be a reliable source of information

Healthcare professionals in forensic or specialist personality disorder services should consider, as part of a structured clinical assessment, routinely using:

- A standardised measure of the severity of antisocial personality disorder (for example, PCL-R or PCL-SV)
- A formal assessment tool such as HCR-20 to develop a risk management strategy

Risk Management

Services should develop a comprehensive risk management plan for people with antisocial personality disorder who are considered to be of high risk. The plan should involve other agencies in health and social care services and the criminal justice system. Probation services should take the lead role when the person is on a community sentence or is on licence from prison with mental health and social care services providing support and liaison. Such cases should routinely be referred to the local Multi-Agency Public Protection Panel.

Treatment and Management of Antisocial Personality Disorder and Related and Comorbid Disorders

The evidence base for the treatment of antisocial personality disorder is limited. In the development of the recommendations set out below these limitations were addressed by drawing on four related sources of evidence, namely, evidence for: (1) interventions targeted specifically at antisocial personality disorder; (2) the treatment and management of the symptoms and behaviours associated with antisocial personality disorder, such as impulsivity and aggression; (3) the treatment of comorbid disorders such as depression and drug misuse; and (4) the management of offending behaviour. Although the focus of several interventions is offending behaviour, the interventions have the potential to help people with antisocial personality disorder address a wider range of antisocial behaviours with consequent benefits for themselves and others.

General Principles

People with antisocial personality disorder should be offered treatment for any comorbid disorders in line with recommendations in the relevant NICE clinical guideline, where available (see section 6 of the original guideline document). This should happen regardless of whether the person is receiving treatment for antisocial personality disorder.

When providing psychological or pharmacological interventions for antisocial personality disorder, offending behaviour or comorbid disorders to people with antisocial personality disorder, be aware of the potential for and possible impact of:

- Poor concordance
- High attrition
- Misuse of prescribed medication
- Drug interactions (including with alcohol and illicit drug)

When providing psychological interventions for comorbid disorders to people with antisocial personality disorder, consider lengthening their duration or increasing their intensity.

The Role of Psychological Interventions

For people with antisocial personality disorder, including those with substance misuse problems, in community and mental health services, consider offering group-based cognitive and behavioural interventions, in order to address problems such as impulsivity, interpersonal difficulties and antisocial behaviour.

For people with antisocial personality disorder with a history of offending behaviour who are in community and institutional care, consider offering group-based cognitive and behavioural interventions (for example, programmes such as â□˜reasoning and rehabilitation´) focused on reducing offending and other antisocial behaviour.

For young offenders aged 17 years or younger with a history of offending behaviour who are in institutional care, offer group-based cognitive and behavioural interventions aimed at young offenders and that are focused on reducing offending and other antisocial behaviour.

When providing cognitive and behavioural interventions:

- Assess the level of risk and adjust the duration and intensity of the programme accordingly (participants at all levels of risk may benefit from these interventions)
- Provide support and encouragement to help participants to attend and complete programmes, including people who are legally mandated to do so

The Role of Pharmacological Interventions

Pharmacological interventions should not be routinely used for the treatment of antisocial personality disorder or associated behaviours of aggression, anger and impulsivity.

Pharmacological interventions for comorbid mental disorders, in particular depression and anxiety, should be in line with recommendations in the relevant NICE clinical guideline (see section 6 of the original guideline document). When starting and reviewing medication for comorbid mental disorders, pay particular attention to issues of adherence and the risks of misuse or overdose.

Drug and Alcohol Misuse

Drug and alcohol misuse occurs commonly alongside antisocial personality disorder, and is likely to aggravate risk of harm to self and others and behavioural disturbances in people with antisocial personality disorder.

For people with antisocial personality disorder who misuse drugs, in particular opioids or stimulants, offer psychological interventions (in particular, contingency management programmes) in line with recommendations in the relevant NICE clinical guideline (see section 6 of the original guideline document).

For people with antisocial personality disorder who misuse or are dependent on alcohol, offer psychological and pharmacological interventions in line with existing national guidance for the treatment and management of alcohol disorders.

For people with antisocial personality disorder who are in institutional care and who misuse or are dependent on drugs or alcohol, consider referral to a specialist therapeutic community focused on the treatment of drug and alcohol problems.

Psychopathy and Dangerous and Severe Personality Disorder

People with psychopathy and people who meet criteria for dangerous and severe personality disorder (DSPD) represent a small proportion of people with antisocial personality disorder. However, they present a very high risk of harm to others and consume a significant proportion of the services for people with antisocial personality disorder. In the absence of any high-quality evidence for the treatment of DSPD, the Guideline Development Group drew on the evidence for the treatment of antisocial personality disorder to arrive at their recommendations. Interventions will often need to be adapted for DSPD (for example, a significant extension of the duration of the intervention). People with DSPD can be seen as having a lifelong disability that requires continued input and support over many years.

Adapting Interventions for People Who Meet Criteria for Psychopathy or DSPD

For people in community and institutional settings who meet criteria for psychopathy or DSPD, consider cognitive and behavioural interventions (for example, programmes such as 'reasoning and rehabilitation') focused on reducing offending and other antisocial behaviour. These interventions should be adapted for this group by extending the nature (for example, concurrent individual and group sessions) and duration of the intervention, and by providing booster sessions, continued follow-up and close monitoring.

For people who meet criteria for psychopathy or DSPD, offer treatment for any comorbid disorders in line with existing NICE guidance. This should happen regardless of whether the person is receiving treatment for psychopathy or DSPD because effective treatment of comorbid disorders may reduce the risk associated with psychopathy or DSPD.

Intensive Staff Support

Staff providing interventions for people who meet criteria for psychopathy or DSPD should receive high levels of support and close supervision, due to increased risk of harm. This may be provided by staff outside the unit.

Organisation and Planning of Services

There has been a considerable expansion of services for people with antisocial personality disorder in recent years involving a wider range of agencies in the health and social care sector, the non-statutory sector and the criminal justice system. If the full benefit of these additional services is to be realised, effective care pathways and specialist networks need to be developed.

Multi-agency Care

Provision of services for people with antisocial personality disorder often involves significant inter-agency working. Therefore, services should ensure that there are clear pathways for people with antisocial personality disorder so that the most effective multi-agency care is provided. These pathways should:

- Specify the various interventions that are available at each point
- Enable effective communication among clinicians and organisations at all points and provide the means to resolve differences and disagreements

Clearly agreed local criteria should also be established to facilitate the transfer of people with antisocial personality disorder between services. As far as is possible, shared objective criteria should be developed relating to comprehensive assessment of need and risk.

Services should consider establishing antisocial personality disorder networks, where possible linked to other personality disorder networks. (They may be organised at the level of primary care trusts, local authorities, strategic health authorities or government offices.) These networks should be multi-agency, should actively involve people with antisocial personality disorder and should:

- Take a significant role in training staff, including those in primary care, general, secondary and forensic mental health services, and in the criminal justice system
- Have resources to provide specialist support and supervision for staff
- Take a central role in the development of standards for and the coordination of clinical pathways
- Monitor the effective operation of clinical pathways

Inpatient Services

Healthcare professionals should normally only consider admitting people with antisocial personality disorder to inpatient services for crisis management or for the treatment of comorbid disorders. Admission should be brief, where possible set out in a previously agreed crisis plan and have a defined purpose and end point.

Admission to inpatient services solely for the treatment of antisocial personality disorder or its associated risks is likely to be a lengthy process and should:

- Be under the care of forensic/specialist personality disorder services
- Not usually be under a hospital order under a section of the Mental Health Act (in the rare instance that this is done, seek advice from a forensic/specialist personality service)

Staff Training, Supervision, Support

Working in services for people with antisocial personality disorder presents a considerable challenge for staff. Effective training and support is crucial so that staff can adhere to the specified treatment programme and manage any emotional pressures arising from their work.

Staff Competencies

All staff working with people with antisocial personality disorder should be familiar with the 'Ten essential shared capabilities: a framework for the whole of the mental health practice' (available from www.eftacim.org/doc_pdf/10ESC) and have a knowledge and awareness of antisocial personality disorder that facilitates effective working with service users, families or carers, and colleagues.

All staff working with people with antisocial personality disorder should have skills appropriate to the nature and level of contact with service users. These skills include:

- For all frontline staff, knowledge about antisocial personality disorder and understanding behaviours in context, including awareness of the potential for therapeutic boundary violations (for example, inappropriate relations with service users)
- For staff with regular and sustained contact with people with antisocial personality disorder, the ability to respond effectively to the needs of service users
- For staff with direct therapeutic or management roles, competence in the specific treatment interventions and management strategies used in the service

Services should ensure that all staff providing psychosocial or pharmacological interventions for the treatment or prevention of antisocial personality disorder are competent and properly qualified and supervised, and that they adhere closely to the structure and duration of the interventions as set out in the relevant treatment manuals. This should be achieved through:

- Use of competence frameworks based on relevant treatment manuals
- Routine use of sessional outcome measuresÂ
- Routine direct monitoring and evaluation of staff adherence, for example through the use of video and audio tapes and external audit and scrutiny where appropriate

Supervision and Support

Services should ensure that staff supervision is built into the routine working of the service, is properly resourced within local systems and is monitored. Supervision, which may be provided by staff external to the service, should:

- Make use of direct observation (for example, recordings of sessions) and routine outcome measures
- Support adherence to the specific intervention
- Promote general therapeutic consistency and reliability
- Counter negative attitudes among staff

Forensic services should ensure that systems for all staff working with people with antisocial personality disorder are in place that provide:

- Comprehensive induction programmes in which the purpose of the service is made clear
- A supportive and open environment that encourages reflective practice and honesty about individual difficulties such as the potential for therapeutic boundary violations (such as inappropriate relations with service users)
- Continuing staff support to review and explore the ethical and clinical challenges involved in working in high-intensity environments, thereby building staff capacity and resilience

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

Recommendations are based on clinical and cost effectiveness evidence. In the absence of appropriately designed, high-quality research, or where the Guideline Development Group (GDG) were of the opinion that there were unlikely to be such evidence, informal consensus process was adopted.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate treatment, management, and prevention of antisocial personality disorder

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- This guidance represents the view of the National Institute for Health and Clinical Excellence (NICE), which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer and informed by the summary of product characteristics of any drugs they are considering.
- Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.
- This guideline draws on the best available evidence. However, there are significant limitations to the evidence base, notably a relatively small number of randomised controlled trials (RCTs) of interventions with few outcomes in common.
- At the time of publication (January 2009), no drug has UK marketing authorisation for the treatment of antisocial personality disorder. The guideline assumes that prescribers will use a drug's summary of product characteristics to inform their decisions for each person.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The Healthcare Commission assesses how well National Health Service (NHS) organisations meet core and developmental standards set by the Department of Health in 'Standards for better health' (available from www.dh.gov.uk). Implementation of clinical guidelines forms part of the developmental standard D2. Core standard C5 says that NHS organisations should take into account national agreed guidance when planning and delivering care.

The National Institute for Health and Clinical Excellence (NICE) has developed tools to help organisations implement this guidance (listed below). These are available on the NICE website (http://guidance.nice.org.uk/CG77). Â

- Slides highlighting key messages for local discussion
- Costing tools:
    - Costing report to estimate the national savings and costs associated with implementation
    - Costing template to estimate the local costs and savings involved
- Audit support for monitoring local practice

Key Priorities for Implementation

Developing an Optimistic and Trusting Relationship

Staff working with people with antisocial personality disorder should recognise that a positive and rewarding approach is more likely to be successful than a punitive approach in engaging and retaining people in treatment. Staff should:

- Explore treatment options in an atmosphere of hope and optimism, explaining that recovery is possible and attainable
- Build a trusting relationship, work in an open, engaging and non-judgemental manner, and be consistent and reliable

Cognitive Behavioural Interventions for Children Aged 8 Years and Older with Conduct Problems

Cognitive problem-solving skills training should be considered for children aged 8 years and older with conduct problems if:

- The child's family is unwilling or unable to engage with a parent-training programmeÂ
- Additional factors, such as callous and unemotional traits in the child, may reduce the likelihood of the child benefiting from parent-training programmes alone

Assessment in Forensic/Specialist Personality Disorder Services

Healthcare professionals in forensic or specialist personality disorder services should consider, as part of a structured clinical assessment, routinely using:

- A standardised measure of the severity of antisocial personality disorder such as Psychopathy Checklist–Revised (PCL-R) or Psychopathy Checklist–Screening Version (PCL-SV)
- A formal assessment tool such as Historical, Clinical, Risk Management-20 (HCR-20) to develop a risk management strategy

Treatment of Comorbid Disorders

People with antisocial personality disorder should be offered treatment for any comorbid disorders in line with recommendations in the relevant NICE clinical guideline, where available. This should happen regardless of whether the person is receiving treatment for antisocial personality disorder.

The Role of Psychological Interventions

For people with antisocial personality disorder with a history of offending behaviour who are in community and institutional care, consider offering group-based cognitive and behavioural interventions (for example, programmes such as 'reasoning and rehabilitation') focused on reducing offending and other antisocial behaviour.

Multi-Agency Care

Provision of services for people with antisocial personality disorder often involves significant inter-agency working. Therefore, services should ensure that there are

clear pathways for people with antisocial personality disorder so that the most effective multi-agency care is provided. These pathways should:

- Specify the various interventions that are available at each point
- Enable effective communication among clinicians and organisations at all points and provide the means to resolve differences and disagreements

Clearly agreed local criteria should also be established to facilitate the transfer of people with antisocial personality disorder between services. As far as is possible, shared objective criteria should be developed relating to comprehensive assessment of need and risk.

Services should consider establishing antisocial personality disorder networks, where possible linked to other personality disorder networks. (They may be organised at the level of primary care trusts, local authorities, strategic health authorities or government offices.) These networks should be multi-agency, should actively involve people with antisocial personality disorder and should:

- Take a significant role in training staff, including those in primary care, general, secondary and forensic mental health services, and in the criminal justice system
- Have resources to provide specialist support and supervision for staff
- Take a central role in the development of standards for and the coordination of clinical pathways
- Monitor the effective operation of clinical pathways

IMPLEMENTATION TOOLS

Audit Criteria/Indicators
Patient Resources
Quick Reference Guides/Physician Guides
Resources
Slide Presentation

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

National Collaborating Centre for Mental Health. Antisocial personality disorder. Treatment, management and prevention. London (UK): National Institute for Health and Clinical Excellence (NICE); 2009 Jan. 48 p. (Clinical guideline; no. 77).

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2009 Jan

GUIDELINE DEVELOPER(S)

National Collaborating Centre for Mental Health - National Government Agency [Non-U.S.]

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National Institute for Health and Clinical Excellence (NICE)

GUIDELINE COMMITTEE

Guideline Development Group

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Declarations of Interests by Guideline Development Group (GDG) Members

To minimise and manage any potential conflicts of interest, and to avoid any public concern that commercial or other financial interests have affected the work of the GDG and influenced guidance, members of the GDG must declare as a matter of public record any interests held by themselves or their families which fall under specified categories. These categories include any relationships they have with the healthcare industries, professional organisations and organisations for people with antisocial personality disorder (ASPD) and their families and carers. Individuals invited to join the GDG were asked to declare their interests before being appointed. To allow the management of any potential conflicts of interest that might arise during the development of the guideline, GDG members were also asked to declare their interests at each GDG meeting throughout the guideline development process. The interests of all the members of the GDG are listed in Appendix 2 of the full version of the original guideline document, including interests declared prior to appointment and during the guideline development process.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) format from the National Institute for Health and Clinical Excellence (NICE) Web site.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Antisocial personality disorder: treatment, management and prevention. Full guideline. London (UK): National Institute for Health and Clinical Excellence (NICE); 2009 Jan. 393 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) format from the National Institute for Health and Clinical Excellence (NICE) Web site.
- Antisocial personality disorder. Treatment, management and prevention. Quick reference guide. London (UK): National Institute for Health and Clinical Excellence; 2009 Jan. 22 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Antisocial personality disorder. Costing report. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2009 Jan. 39 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Antisocial personality disorder. Costing template. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2009 Jan. Various p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Antisocial personality disorder. Implementing NICE guidance. Slide set. London (UK): National Institute for Health and Clinical Excellence; 2009. 17 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Antisocial personality disorder (adults). Audit support. London (UK): National Institute for Health and Clinical Excellence; 2009. 29 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Antisocial personality disorder (children and young people). Audit support. London (UK): National Institute for Health and Clinical Excellence; 2009. 25 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- The guidelines manual 2007. London (UK): National Institute for Health and Clinical Excellence (NICE); 2007 April. Electronic copies: Available in Portable Document Format (PDF) from the National Institute for Health and Clinical Excellence (NICE) Web site.

Print copies: Available from the National Health Service (NHS) Response Line 0870 1555 455. ref: N1763. 11 Strand, London, WC2N 5HR.

PATIENT RESOURCES

The following is available:

- Antisocial personality disorder. Understanding NICE guidance - Information for people who use NHS services. London (UK): National Institute for Health and Clinical Excellence; 2009 Jan. 12 p. (Clinical guideline; no. 77). Electronic copies: Available in Portable Document Format (PDF) from the National Institute for Health and Clinical Excellence (NICE) Web site.

Print copies: Available from the National Health Service (NHS) Response Line 0870 1555 455. ref: N1764. 11 Strand, London, WC2N 5HR.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

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